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14 September 1978

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# TRANSLATIONS ON TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 53





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# TRANSLATIONS ON TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 53

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MPR, USSR ORGANIZATIONS SIGN AGREEMENT ON RADIO RELAY LINE

Ulaanbaatar MONTSAME in Russian 1835 GMT 28 Aug 78 OW

[Text] Ulaanbaatar, 28 August (MONTSAME)--A general agreement on the construction of a radio relay line between Dashinchilen and Erdenet (central Mongolia) was signed here today by the [Soviet] "Prommashexport" All-Union Export and Import Association and the Mongolian "Kompleksimport" Association.

The new line, which will be built jointly by Mongolian and Soviet construction workers, will soon link the mining city with the republic's capital. As a result, Erdenet residents will be able to receive central radio broadcasting and television programs and view programs carried over the "orbita" system.

The agreement was signed for the Mongolian side by D. Dorjpalam, chairman of the Mongolian "Kompleksimport" Association, and for the Soviet side by V. A. Sidelnikov, acting economic counselor at the USSR Embassy in the MPR.

The signing of the document was attended by D. Saldan, chairman of the MPR State Committee for Foreign Economic Relations and minister of the MPR; D. Gotob, MPR minister of communications; S. Purebjab, chairman of the State Information, Radio, and Television Committee of the MPR Council of Ministers; and other officials.

CSO: 5500

## BRIEFS

GDR-MADAGASCAR AGREEMENT--Rudolf Schulze and Rakotovac Andriantiana, ministers of posts and telecommunications of the GDR and the Democratic Republic of Madagascar, respectively, on 30 August in Berlin signed a government agreement on postal and telecommunications cooperation. It contains provisions to expand relations in the communications field and to deepen scientific-technical cooperation. During his visit the minister briefed himself on the state of development in various sectors of the GDR postal and telecommunications system. [Text] [East Berlin ADN 1826 GMT 30 Aug 78 LD]

'INA'-'TAP' COOPERATION AGREEMENT--Tunis, 15 August--The Iraqi News Agency [INA] and the Tunis Afrique Press [TAP] today signed a cooperation agreement. The contract was signed by INA Director General Muhammad Manaf al-Yasin and TAP Director General Mahmud al-Turayki. The agreement provides for the exchange of news and press photos, rendering facilities to the correspondents of the two agencies in both countries, and training reporters and technicians. It will be recalled that Mr al-Yasin has been visiting Tunisia for a few days at Mr al-Turayki's official invitation. [Text] [Baghdad INA in Arabic 1600 GMT 15 Aug 78 JN]

CSO: 5500

INDIA-SRV SIGN AGREEMENT ON RADIO, TV COOPERATION

Delhi ISI in English 1433 GMT 29 Aug 78 BK

[Text] India and the Socialist Republic of Vietnam signed a protocol on August 28 on cooperation in the field of radio and television between the two governments. L. K. Advani, minister of information and broadcasting, signed on behalf of the Government of India and His Excellency Tran Lam, chairman, the State Committee for Radio and Television, the Socialist Republic of Vietnam, on behalf of his government.

Signing the agreement, Advani said that it was one more milestone in strengthening the relations between two countries. Describing the agreement as an important step in promoting better understanding, he expressed the hope that the peoples of the two countries would appreciate the cultural achievements of each other.

Speaking on behalf of his government, Tran Lam described the protocol as a significant document. He was confident that this would create favorable conditions to bring the peoples of the two countries closer and appreciate each other's problems.

The agreement provides for regular exchange of radio programs, highlighting development in the social, economic, scientific and cultural fields in the two countries.

The programs will be exchanged in the form of tapes, scripts, etc and will comprise of music programs, radio plays, etc.

The agreement also provides for the exchange of television documentaries, newsreels and programs on social, economic, cultural, arts and sports matters and educational programs for children, youth and adults.

Both the countries will exchange full texts and scenaries of plays written for television. There will be an exchange of technical, scientific and technical papers related to radio and television.

The agreement also provides for mutually arranged visits of staff members for the preparation of programs and training facilities for the radio and TV personnel in both the countries.

Earlier in the evening the delegation called on Advani and met senior officials of the ministry, All India Radio and Doordarshan [television].

CSO: 5500

## BRIEFS

'SATELLITES IN BROADCASTING' MEETING--A group of experts on "satellites in broadcasting" from six nonaligned countries which met in New Delhi from August 5 to 7 has come to the conclusion that direct sound broadcasting in the one GHZ band via satellite is technically feasible, reports PTI. Releasing the conclusions of the meeting, chairman of the group S. N. Mitra, chief engineer, All-India Radio, said this mode of transmission from the satellite would permit reception by relatively inexpensive and mobile receivers. The group also recommended that a suitable frequency allocation should be sought for direct sound broadcasting at the 1979 World Administrative Radio Conference to be held in Geneva under the auspices of the International Telecommunication Union. Besides India, which is the chairman of the group, other countries represented at the meeting were Algeria, Guyana, Kenya, the Democratic People's Republic of Korea, Nigeria and Yugoslavia. [Text] [Delhi ISI in English 1450 GMT 8 Aug 78 BK]

CSO: 5500

JRRC RECOMMENDS SOUND MULTIPLEX BROADCASTING SYSTEM

Tokyo KYODO in English 0012 GMT 30 Aug 78 OW

[Text] Tokyo, 30 Aug (KYODO)--TV viewers may be able to enjoy foreign movies shown on television in their original language and not in dubbed-in Japanese as the Radio Regulatory Council has recommended to the Posts and Telecommunications Ministry that use of sound multiplex broadcasting system be allowed by broadcasting companies.

Ministry officials said Tuesday that use of such a system may be allowed from October at the earliest.

Japan will become the first country in the world to adopt such a system.

According to the recommendation made to Posts and Telecommunications Minister Yasushi Hattori, the multiplex broadcasting system will be authorized for use for stereo programs and foreign TV movies.

Authorization will be given to only existing television broadcasting companies.

In order to utilize the system, a user must install an adapter containing a speak and tuner into his set.

The adapter costs between Yen 30,000 and Yen 40,000.

Users of stereo sets also must install a tuner costing around Yen 10,000.

Twenty-four commercial TV broadcasting firms in the country, including five in Tokyo, have applied for adoption of the sound multiplex broadcasting system.

An application also is expected to be filed shortly by the Japan Broadcasting Corporation [NHK].

NHK is planning to use the sound multiplex system for part of its news programs and also for the Columbo, a popular American TV series.

Nippon Television Network [NTV] also is planning to stereorize music programs and professional baseball games telecast by it.

They plan to adopt the system for practical use from October.

CSO: 5500

ADOPTION OF SOUND MULTIPLEX BROADCASTING SYSTEM CONSIDERED

Tokyo KYODO in English 0012 GMT 30 Aug 78 OW

[Original paragraphing not followed]

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CSO: 5500

## BRIEFS

HEILUNGKIANG TELEVISION STATION--Approved by the Heilungkiang Provincial Party Committee, the Harbin Television Station will be renamed the Heilungkiang Television Station effective 1 August. The station will telecast its own programs on a trial basis every Monday, Wednesday and Friday, and will relay color programs from the No 1 program of the Central Television Station every Tuesday, Thursday, Saturday and Sunday. [Harbin Heilungkiang Provincial Service in Mandarin 1100 GMT 28 Jul 78 OW]

SHANGHAI TV, DEFENSE ENGINEERS--Shanghai, 2 Aug--Chou Liang-i, 34, and Yeh Yueh-hsing, 37, who joined the Shanghai People's Chemical Plant in 1968 and 1970 respectively after graduating from college, have each been promoted to the rank of engineer for contributions to China's television and national defense industries. Working with workers and other technicians, Chou and Yeh have produced experimentally more than 10 kinds of fluorescent power. About one third of these products, including colored fluorescent power and ultra-short remnant-rays fluorescent power, have not previously been produced in China. All these products are important materials in the television and defense industries. [Peking NCNA Domestic Service in Chinese 0208 GMT 3 Aug 78 OW]

SHANGHAI COMMUNICATIONS SYSTEM--The photoconductor [optical] fiber communications system being developed in Shanghai is making good progress. This new technology employs quartz or glass fiber as conductors for message transmissions through optical waves. It has a capacity of millions of telephone channels and over 1 million telegraph channels, is highly resistant to interference, reliable, inexpensive and easy to operate. The raw materials it requires are also abundantly available locally. To modernize China's communications as soon as possible, the Shanghai Municipal Science and Technology Commission and the departments concerned established a leading group and office for the research and manufacture of this new communications system early this year. The main equipment is being manufactured by the No 519 factory, which expects to complete the task before the next National Day. The Chingpu glass factory is producing the photoconductor fiber with technology and equipment turned over to it by the Silicate Research Institute after the latter completed its research by the end of March. All other research, production and user units are working with the system in the cooperative spirit of fighting a joint battle. [Shanghai City Service in Mandarin 1300 GMT 2 Aug 78 OW]

SHANTUNG-HOPEH MICROWAVE--The project of building a 960-channel microwave system between Tsinan in Shantung Province and Shihchiachuang in Hopeh Province was successfully completed, and the network was put into operation on 23 July. It has begun to relay the television program of the Peking station and others. The project extends 315 kilometers. There are eight relay stations in the network. Construction of the project began in October 1977, and on 26 December the circuit was opened on a trial basis. After repeated trials and readjustments over 6 months, the project has been fully put into operation, thus enabling Shantung province to reach a new level in relaying television, telephone, telegraph and facsimile transmissions. At the meeting to celebrate the formal opening of the 960-channel microwave network between Tsinan in Shantung Province and Shihchiachuang in Hopeh Province, vice chairman of the Shantung Provincial Revolutionary Committee Chu Pen-cheng delivered a congratulatory speech. [Tsinan Shantung Provincial Service in Mandarin 1130 GMT 28 Jul 78 SK]

CSO: 5500

## BRIEFS

NEW RADIO STATION--A new radio station of the Public Relations Department with a 10-kilowatt AM transmitter will be set on a 33-rai area in Takua Pa District of Phang-Nga Province, the operation of the station will help provide broadcasting service to the audience in the district and those in nearby areas where at present the national broadcasting station service cannot be received. [Text] [Bangkok Domestic Service in English 0000 GMT 22 Aug 78 BK]

CSO: 5500

## BRIEFS

RADIO-TV GROUPS' ASIA TOUR--Hanoi, Aug 23--A delegation of the Vietnam Radio and Television Commission led by its chairman Tran Lam, left here today for New Delhi, beginning its friendly tour of India, the Philippines, Malaysia, Indonesia and Thailand. The delegation's visit is being made at the invitation of the Asia-Pacific Institute for Broadcasting Development of UNESCO and the broadcasting and television organizations of the above-mentioned countries. It was seen off at the airport by the representative of the Indian Embassy in Vietnam. [Hanoi VNA in English 1602 GMT 23 Aug 78 OW]

CSO: 5500

MINISTRY ADMITS WEAKNESSES IN TELEPHONE COMMUNICATIONS

Sofia OTECHESTVEN FRONT in Bulgarian 16 Aug 78 p 2

[Telephone Communications]

[Text] In its issue #10337 this newspaper published critical material by Ekaterina Dimitrova, entitled "Cracks in the Communication System" which revealed a number of shortcomings in various units of the communications department mentioned by our readers and commented upon by the author.

We received written answer by St. Stanoev, secretary general of the Ministry. Accepting the criticism the answer offers extensive explantions for the conditions of the telephone system in the country and in Sofia in particular. We are quoting those parts of the Ministry's answer which are of interest to a wider circle of readers.

It is stressed that the Ministry of Communications takes into consideration the public opinion concerning the condition of the telephone service and for each specific case it takes the necessary measures. The Ministry is also quite concerned about the quality of the telephone connections. Complex measures are being taken to resolve these problems.

What causes, for example, scrambling and disconnecting of the telephone calls as well as some other shortcomings mentioned by our readers? Not everybody knows that the national trunk line network consists of old telphone exhanges. Improvements have been made, of course, which, however, cannot change essentially the technical and operational condition of the exchanges. Furthermore, the Ministry is forced to return and discard a great nember of the communication products turned out by the Resprom plants.

In order to innovate and expand the telephone network particularly in Sofia, one needs considerable capital investments, time for industry to adopt the necessary long distance technology and for constructing production-technical centers. Time is also necessary for importing of equipment, installing, etc.

One also points out that the underground cables are often damaged by the digging and installing work of the construction organizations. The technical

parameters of the cables are decreased when they have been torn and repaired. The results are: wrong dialing, noisy or double connections (so called listening in on conversations) etc. Cable damaging is not a rare phenomenon. Only in Sofia, for example, last year during different periods, underground cable and connecting pairs with capacity for over 10,000 subscribers have been put out of operation.

The busy signal when dialing in Sofia is now, according to the Ministry of Communicaitons, a rarer phenomenon but it is very difficult to get a free line in long distance dialing. The reason is found in the insufficient number of telephone connections particularly during the peakhours of the day. The capacity of the existing exchanges cannot keep up with the growing needs.

The Ministry of Communication has its own program and implements its own undertakings for developing better telephone communicatins. Currently it is engaged in completing the equipment and expanding of the Sofia deal exchange and connecting cable networks which will increase their transmission capability. Additional equipment is installed to the direct dial long distance exchanges. At the Sofia ATTs [dial telephone exchange] Levski the installation is going on of a more modern automatic dial exchange. The automatic equipment for testing the technical capability of the installations has been successfully completed. Such new telephone installations will be adopted in all Sofia exchanges within the following 2 years.

Besides the technical undertakings, the Minsitry together with the Trade Unions does considerable work in training the personnel and specialists, adapting the subjective factor with the new and higher requirements of the July Plenum of the Central Committee of the BCP and the National Party Conference.

The letter of the Ministry reports the specific measures concerning each complaints of the readers as well as the punishment imposed to any guilty person.

It is stated at the end of the letter that the leadership of the Ministry of Communications does not leave unchecked a single complaint and does the utmost to improve the telephone service.

1010
CSO: 5500

## BRIEFS

TRANSMITTER AGAIN IN OPERATION--After being out of commission for 4 weeks, the medium-wave radio transmitter at Dobrochov in the Prostejov area was put back into operation on Saturday [5 Aug] morning. The transmitter broadcasts programs of the Radio Prague National Network on the 314.7 meter wavelength. The main mast body has been repaired and the isolators of the anchoring cables exchanged 10 days before the set deadline. [Text] [Prague RUDE PRAVO in Czech 7 Aug 78 p 2 AU]

CSO: 5500

## BRIEFS

INTERNATIONAL TELECOMMUNICATION CONGRESS--Budapest, August 29 (MTI)--A four-day International Telecommunication Conference began Tuesday morning at the Telecommunication Research Institute of Budapest. Jointly organized by the International Union of Radio Science [IURS] and the Hungarian Academy of Sciences, the session is being attended by some 350 experts from England, Australia, Belgium, Bulgaria, Czechoslovakia, the United States, Egypt, Finland, France, Greece, the Netherlands, India, Ireland, Iraq, Iran, Israel, Japan, Yugoslavia, Canada, Cuba, Poland, Libya, the German Democratic Republic, the Federal Republic of Germany, Norway, Italy, Romania, Switzerland, Sweden, the Soviet Union and Turkey. These include Professor Stumpers, who is represented IURS [as received] and Soviet Academician V. Y. Siforov. Some 230 lectures--including 50 by Hungarian researchers--are to be delivered at the meeting. These will range from theoretical and practical planning of telecommunication to radio systems. Papers will be read also on the application of computers for planning circuits, production and micro-wave components and circuits and telecommunication measurement technics. [Text] [Budapest MTI in English 1025 GMT 29 Aug 78 LD]

CSO: 5500

COMMUNICATIONS GOALS FULFILLED TO MARK 26 JULY HOLIDAY

Havana GRANMA in Spanish 22 Jul 78 p 1

[Article by Jesus Mena]

[Text] Praiseworthy work has been done by communications workers throughout the country in order to meet the schedule set up for tasks included in the plan to expand and improve the Ministry of Communications in salute to the 25th anniversary of the attack on the Moncada Barracks and the celebration of the far-reaching youth event.

These tasks include the completion of the automatic telephone system from the provinces of Santiago de Cuba and Bayamo to Ciudad de La Habana, with Minister Pedro Guelmes pronouncing its official opening yesterday. The tasks also involve the construction of a 20-meter-high self-supported tower in Puerto Boniato, where the parabolic antennas for microwave equipment will be installed making it possible to connect Santiago with Bayamo and, through the 07, with Ciudad de La Habana.

Another 75-meter tower was built for television antennas, in addition to 10 structures over 90 meters high to guarantee radiobroadcasting transmissions. These construction projects marked the fulfillment of the tower construction program drawn up.

A new telephone central will go into operation today in Guanajay with a capacity of 500 automatic lines. At the same time, the automatic dialing service connected with the country's capital will begin to function, along with direct reception of calls from Havana through the 051 number.

This information was released by Orlando Suarez, director of the Ministry of Communications Construction and Assembly Enterprise, who added that in the telephone branch, work was completed ahead of schedule on such projects as the installation of a new 2,000-line telephone central, model ATZ-65, in Bayamo, and 320 new telephone circuits in the eastern provinces, making better long-distance service possible.

Suarez also described other projects completed by the Ministry of Communications workers, including an automatic telephone central with 240 lines and 12 telephone circuits. It will go into operation on 24 July in the municipality of Melena del Sur, thereby improving long-distance service substantially.

On 25 July, five new automatic telephone centrals will be completed, two with 80 lines each, located in Las Martinas and Isabel Rubio in Pinar del Rio Province. The three remaining centrals will operate in La Sierpe in Sancti Spiritus Province, Ranchuelo in Villa Clara Province and Guatemala in Holguin Province. They will have a capacity of 160, 400 and 320 lines respectively.

The radiobroadcasting and television branch is another area in which substantial development has taken place with the use of modern technological equipment.

In Las Tunas Province, the services of the provincial chain in the southern zone will be expanded with the installation of a new 1-kilowatt transmitter in Amancio Rodriguez. Work is being done on the installation of a high-quality connection in order to bring the signal from Tunas to the transmitter. At the same time, the service in Holguin and Ciego de Avila provinces is being expanded and improved and the plan to install transmitter antennas continues.

Orlando Suarez stated that these and many other achievements of the communications workers had the cooperation of the party and the people's governments in the different provinces.

11,464
CSO: 5500

PRESSURIZATION EQUIPMENT PROTECTS TELEPHONE CABLES FROM HUMIDITY DAMAGE

Montevideo EL PAIS in Spanish 29 Jul 78 p 7

[Text] Almost all telephone cables in trunk lines linking service centers of Montevideo as well as La Paz and Las Piedras are now protected against humidity by pressurization equipment, according to an ANTEL [National Telecommunications Administration] report to EL PAIS.

This project is part of the work plan developed by ANTEL during its fourth year of existence, a plan which includes also partial expansion in Montevideo, especially in Pocitos, Paso del Molino and Aguada, and provision of new service in housing complexes such as Parque Posadas, Carbe Aguada and Zapican.

IDB Contract

One of the milestones reached in the framework of the contract signed with the Inter-American Development Bank (IDB) were the signing of a contract with the CONSUTEL consulting firm, charged with studying the bids and supervising the execution of the new microwave systems which will link all the capitals and principal cities of the nation, the call for bids for installing a modern new coastal system and lastly the acquisition of cable in the amount of almost 4 million dollars. This cable is plastic and will replace the type made of lead and dry paper. Some plastic cable has already been laid.

Enlarging Trunk Lines

Separately from the contract mentioned, other supply contracts were signed with two important firms, one for trunk cables for linking service centers along with their own pressurization equipment and the other for multiple electronic equipment to allow for enlarging the capacity of trunk lines between centers without laying new cable.

It is hoped that this equipment will improve communication between Paso Molino and Santiago Vazquiez, Aguada and Manga, Aguada and Carrasco as well as Aguada and San Jose de Carrasco.

4 Million Dollars U.S. for Microwave Links

The total outlay for installation of microwaves during the fourth year of ANTEL's activity was estimated at about 4 million U.S. dollars.

These projects include provision of new long distance service via microwave radio links between Montevideo and Maldonado including Atlantida and Cerro de San Antonio, in Piriapolis, addition of 24 channels between Montevideo and Rosario and 12 between Montevideo and Colonia, increasing the number of telephone channels based on microwave connections from 312 to over 1,000, which will allow for introduction of the international communications system of Buenos Aires into Montevideo and, during the first phase, dialing from Montevideo to Buenos Aires through an operator, as well as connections with Argentina from other telephonic centers of Uruguay, especially Maldonado and Atlantica.

11,989
CSO: 5500

## ANTEL LISTS MAJOR ACHIEVEMENTS ON FOURTH ANNIVERSARY

Montevideo LA MANANA in Spanish 26 Jul 78 p 6

[Text] Celebrating yesterday the fourth anniversary of ANTEL, its officials released a summary report on the work completed by the agency during this fourth year of operation. Worth noting are the installation of new automatic service centers in the interior, that is, in Melo, La Paz and Fray Bentos, as well as expansion of other centers such as Maldonado, increased by 1300 numbers to a total of 4,000, an addition of 1,000 at Paso, bringing its total capacity to 16,000, and addition of 2,000 at Union, bringing its capacity to 2 x 16,000 numbers. Malvin was enlarged by 1,000 to a total of 8,000, and in Colonia last June 400 new numbers were installed, bringing the center's capacity to 1,300 numbers. At manual centers important expansions were made at San Carlos, Pando, Young and Nueva Palmira.

### Protection of Trunk Cables

Installation of pressurizing equipment continued, and now almost all trunk cables linking centers in the Montevideo area are protected in this fashion, as are those in La Paz and Las Piedras. Also work was done according to terms of a contract for renewing lines of subscribers or equipment in poor condition. New construction or expansion took place on networks in Melo, Paysandu, Salto, La Paz, Fray Bentos, Maldonado, Peninsula, La Barra de Maldonado and Young; work began on networks for Parque del Plata, Salinas, Durazno and Cebollati.

### IDB Contract

Regarding work included in the contract with the Inter-American Development Bank, important milestones were reached, including: signing of a contract with the consulting firm CONSUTEL, charged with studying bids and supervising execution of the projects; bidding, evaluation and making of awards for the new microwave systems which will link all the capitals and principal cities of Uruguay.

Also a call went out for bids for installation of a modern coastal service. Lastly cable was bought for almost 4 million dollars. It is of the plastic type which will replace the kind made of lead and dry paper; some plastic cable is already in use.

Separately from the contract mentioned, other supply contracts were signed with two important firms, one for trunk cables for linking service centers, along with their own pressurization equipment, and the other for multiple electronic equipment to allow for enlarging the capacity of trunk lines between centers without laying new cable in Paso, Santiago Vazquez, Aguada-Manga, Aguada-Carrasco and Aguada-San Jose de Carrasco.

Microwave Radio Connections

Early in the year long distance service by the new system of microwave radio connections began between Montevideo and Maldonado, including Atlantida and Cerro San Antonio (Piriapolis); also the existing system was enlarged between Montevideo and Buenos Aires with an extension to Florida. The new radio connections are composed of 2 radio channels with 960 telephone channels of capacity, one for service and the other a reserve. The latter channel can be used for occasional broadcasts of television programs with sound. Completion of these projects required construction of buildings as well as three reinforced concrete towers of over 80 and 30 meters in height respectively in Atlantida, Cerro San Antonio and Maldonado and a free-standing steel tower of 120 meters in Florida.

Buenos Aires Service in Montevideo

Multiplex telephone equipment is planned with initial additions of new channels in the following numbers of connections with Montevideo: Maldonado 288, Atlantida 60, Florida 108, San Jose 84, Buenos Aires 120. Through this project, the number of telephone channels based on microwave connections went from 312 to over 1,000. This important increase in the number of channels with Buenos Aires will allow soon for beginning international phone service between Montevideo and Buenos Aires and improving dialing service with the help of operators, in the first phase, between Montevideo and Buenos Aires, as well as connections to Argentina from other telephone centers of Uruguay, especially Maldonado and Atlantida.

The approximate outlay for these radio wave projects comes to more than 4 million dollars.

As of the end of the third year of ANTEL's existence, that is, last year, there were phone connections between subscribers of Salto and Paysandu and between Montevideo and subscribers in Maldonado, Punta del Este, Barra de Maldonado, Las Peidras, San Jose and Colonia. The present situation can be summed up in this manner: there are connections among Montevideo (about 60 percent of subscribers), Maldonado, Punta del Este, Peninsula de Punta del Este, Barra de Maldonado, Las Piedras, La Paz, Canelones, San Jose,

Colonia, Atlantida and Florida. Also there is dialing service between Paysandu and Salto and between Mercedes and Fray Bentos; subscribers in Minas can connect with Montevideo.

Lastly it will be noted that on 1 June 1978, because of a contract signed with private television firms of Montevideo, a station receiving television via satellite began operations, and soon specifications will be issued for the call for bids for supplying additional equipment which will make it usable for telephone, telex and international telegraph operations.

11,989
CSO: 5500

## BRIEFS

TRANSFORMER PURCHASE--This afternoon a new contract between UTE [General Administration of State Electric Power and Telephones] and two Uruguayan firms was signed for manufacture and delivery of transformers during the next 5 years, in an operation which is notable not only for its cost, 42 million pesos, but also for its impact on the development of employment opportunities in Uruguay. The contract was signed by representatives of the firms of Crul and Mak; acting for UTE were its president, Gen Antonio Cirilo and general manager engineer Horacio Mendez. The operation constitutes also a boost for Uruguay's industry, because the new contract goes beyond the first one, which was for the manufacture of small transformers, and includes the largest ones used by UTE in its networks. The first contract of this type lasted 4 years and has just expired. It called for these firms to make transformers of up to 200 kilowatts capacity. The excellent results obtained made it possible for the contract being signed this afternoon to include the delivery of transformers to distribute power up to 500 kilowatts, the largest which are used on UTE networks. The contract being signed this afternoon will last for 5 years; based on present prices, the firms are to deliver transformers during the first year with a value of 10 million pesos. During each of the following years transformers are to be delivered with a value of 8 million pesos. This is an important investment in Uruguay on account of the amount of labor required to make the transformers. It is estimated that labor comprises 50 percent of the value of the transformers. Therefore UTE is making a significant contribution to the labor force and it can be seen that the Uruguayan transformer industry has a good reputation. [Text] [ Montevideo LA MANANA in Spanish 27 Jul 78 p 5] 11989

DIALING SYSTEM--On 12 July 1978 work will be completed on the automatic telephone center of Fray Bentos to supersede the old and outmoded manual system and the obsolete network of bare wire with a modern automatic service center and a network of new underground cables. Also, on the same day the automatic centers of Mercedes and Fray Bentos will be connected via direct dialing. In keeping with the system of gradual improvement of telephone service and also the efforts to make service automatic in all department capitals, ANTEL will inaugurate on 12 July the automatic center at Fray Bentos, and this will leave only the city of Durazno to be made automatic; this will be done before the end of the year. Besides this improvement which is so important to the Rio Negro capital there will be direct dialing service to the neighboring city of Mercedes, capital of Soriano, which will allow phone users of both cities to make direct connections, without having to work through the long distance operator. [Text] [Montevideo LA MANANA in Spanish 6 Jul 78 p 6] 11989

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TRENDS, DEVELOPMENTS IN ARAB INFORMATION MEDIA DISCUSSED

London AL-DUSTUR in Arabic 19-25 Jun pp 36-37

[Article: "Arab Television Faces Two Crises: General Program Development Sought for the Arab Small Screen, and Baghdad Seeks a Unified Information System to Face the Enemy"]

[Text] During the past few weeks, a succession of communications meetings, conferences and panels at the Arab and international levels were held, including a meeting in Havana, Cuba at the end of last April of the International Council for Information Coordination of the non-alined nations. The Iraqi delegation to this meeting was headed by Mr Sa'd Qasim Hamudi, minister of information.

The basic feature of these intense activities is the introduction in the Arab information program of scientific planning and long-range programming with clearly defined goals. The best example of this is the "Arab Listeners and Viewers Research Center" located in Baghdad and headed, since the beginning of this year, by Dr Nawwaf 'Adwan, who studied movie production and journalism in France (1968-1971), and who earned a doctorate degree in communications (1976) prior to working in Paris during 1976-1977 as a correspondent for the Iraqi Radio and Television.

The Arab Center for Listeners and Viewers Research was established on the basis of a decision by the General Secretariat of the Arab States' Broadcast Federation, to be attached to the federation, to be autonomous and to be permanently headquartered in Baghdad; it will be financed by the Public Organization for Radio and Television for a period of 2 years, and this organization with the general secretariat, jointly supervises it beginning 14 March 1977.

The basic mission of the center is to cooperate with Arab broadcast organizations in creating related policies of listeners and viewers research for the purpose of generating a unified Arab policy of mass audio and visual means of communicating as a service to the Arab information program and to meet their demands for research which no one Arab country can conduct on its own--all this in order to develop cultural and educational work in the Arab

world by relying on the cooperation of similar international institutions and centers, and the coordination among Arab centers to prepare joint projects in the areas of radio and television and to educate and prepare the Arab youth scientifically and purposefully.

The primary areas on which the center focuses its activities are: discovering Arab cultural and artistic talents; developing scripts and adopting a new directed style in scenario writing; knowing and presenting the new communication methods and discovering clear methods of training to generate an audio-visual art which has become an internationally acknowledged and specialized art; unifying and broadcasting communication and research terminologies; and finally evaluating the means of mass communication.

A Linkage Crisis

On the other hand, the center, in cooperation with specialized international and Arab research centers, conducts theoretical and field experiments, and joint national and regional research which is useful in determining an interrelated policy in the realm of mass communication and in the directing and planning of radio and television programs and children's programs. As for the areas in which the center applies its studies and research, they are many, and the most important are: analyzing the manner by which to benefit from means of communication in education, teaching and social development; studying how time is spent and its relationship to listening to the radio and viewing television; studying the impact of radio and television on the masses; creating and performing talents; using modern mobile equipment (video) in educating the sectors not reached by television; analyzing the contents of enemy audio-visual programs and documentaries and devising opposing plans; and studying and analyzing enemy information samples and preventing the spread of their contents that threaten the Arab and Third World cultures.

According to Dr Nawwaf 'Adwan, "the system of broadcasting of most Arab television stations is experiencing a crisis in transmission and reception due to the lack of contact which is supposed to link them. The system is also facing the crisis of substance and form and the crisis of programming and timing, in that it does not take into consideration the concerns and ambitions of listeners and viewers on the one hand, and their leisure time on the other hand. Prior advertisement, at least a week ahead of time, of a series or educational program will facilitate the process of contact, and will assist the listener or viewer to organize his time in order not to miss that program which might be the most needed incentive for creativity and excellence to develop."

However, theories concerning communication models are many and varied. There is, for example, the theory of the American sociologist Laswell, who concentrates on the substance alone and disregards people's reactions, while Stevenson, another American scientist, does not believe in analyzing the content, but focuses on the need to present educational programs within the framework of entertainment, and calls for developing the public taste. In the meantime, the researcher Shanon demonstrated that the message might become distorted prior to reaching its target, and its meaning then lost.

(Shram), on the other hand, focuses on the understanding of the transmitter and the receiver of the message itself, and he has asserted the necessity of both parties having similar experiences, while Lazar Sefield regards communication as having two stages: during the first, the receiver is not directly influenced by the message, but is more influenced by opinion leaders, and during the second, the receiver, having been influenced by the opinion medium, in turn influences others, and vice versa.

In addition to these, the Canadian researcher MacLuni gives primary importance to the electronic communication media, ignoring both the content and the receiver, assuming that electronic means of communication are capable of having an impact by virtue of the picture and sound that affect the senses, especially the eye and the ear, in addition to the nervous system, which affects the individual and determines his behavior and movements in any place and at any time. Although this last theory has been favored in the U.S., it has not, however, been accepted in developing nations, which continue to place primary emphasis on controlled contents.

Towards Unity

On the basis of all these considerations, the Arab States' Broadcast Federation realized the need to establish an Arab center for listeners and viewers research to undertake the task of studying the problems and difficulties facing the development of Arab broadcast services and Arab cooperation in order to direct it towards meeting popular educational, cultural and social needs, and move towards the establishment of a joint Arab communication strategy capable of assessing the information crisis and the Arab information role, which should be commensurate with the scope of the enemy's information challenge.

Now, a year after the establishment of the center, it is possible to specify the difficulties that must be overcome as follows: the absence of accurate statistics of the Arab broadcast and television stations in the administrative, technical personnel and production areas; the absence of a unified Arab program for research to be relied upon on conducting studies; the lack of research units in most Arab broadcast and television organizations; lack of specialized cadres in researching communication means; the absence of joint Arab planning and coordination; the inability of Arab broadcast and television organizations to channel words, deeds and work in a planned and programmed manner; and finally the difficulty of joint Arab programs and production exchanges.

In an attempt to answer the question, where do we bein, the center, in cooperation with the General Secretariat of the Arab States' Broadcast Federation and UNESCO, and with the assistance of some Arab and foreign communications experts, planned the following:

At the national level the center organized a training session in October 1977 in the area of listeners and viewers research in which a number of Arab states

and Iraqi researchers participated. The states that nominated trainees were Egypt, Libya, Democratic Yemen, Kuwait, Tunisia, Jordan, and Iraq. The purpose of this first session was to train Arab specialists to conduct communications research, especially in all theoretical and practical aspects of listeners and viewers research. The center also focused on analyzing and evaluating the contents of Arab children's programs. However, the Arab states that provided reports in this respect were few. Full reports were submitted only by Baghdad and Qatar, which gave the center the opportunity to study and analyze the contents of a sample of children's programs presented by Iraqi and Qatari television. This research will be followed by more comprehensive and broad research to be completed this month.

As for the state level, the Arab Center for Listeners and Viewers Research was able, in cooperation with the communication research unit of the Public Organization for Radio and Television to complete the following four studies: the first concerns the relationship of television to children, its impact on children younger than 6 years old, and the opinions of parents concerning the reaction of their children to television programs. The second study contained direct interviews with children between the ages of 6 and 14 years to determine their preference and the extent of their acceptance or rejection of television programs generally and children's programs specifically. The third study analyzed a text sample of radio plays, while the fourth study focused on viewers' opinions regarding the broadcast period which Baghdad television instituted on Fridays from 2 pm until 4 pm, which in the past was an intermission period.

An Arab Tour

This month the center's director will tour the Arab states of Tunisia, Morocco, Sudan, Algeria and Libya for the purpose of conducting two studies: one is a fact-finding study of Arab radio and television in the areas of programming, personnel, training and research; the second is a study to analyze the contents of a sample of children's television programs. The center also intends to analyze the contents of hostile radio and television programs, especially the Zionist radio and television.

The center submitted a working paper to the General Secretariat of the Arab States' Broadcast Federation concerning the design of a plan for a joint Arab strategy along the following lines: the necessity of creating a unified information system; the necessity of total cooperation and coordination in Arab radio and television; the necessity of creating a higher Arab information authority charged with specifiying the modes of communications cooperation and coordination; and finally the facilitating of the mission of Arab researchers interested in long-term research in order to benefit from their results and to incorporate them into the comprehensive national development plan.

The Arab center does not limit its interests to the Arab scene alone, but attempts to extend bridges to the non-alined nations. This was encouraged during the last meeting of the International Council for Information Coordination that was held in the Cuban capital. At that meeting discussions were held concerning the creation among the non-alined nations of a joint information strategy in the realm of radio and television in light of the

accelerating technological revolution in the field of communications, which is being monopolized by imperialist states who dominate all the sources of international news agencies in addition to their domination of the distribution and production markets of television movies. This requires a review of the current system, and replacing it with a new international information system congruent with a new international economic order based upon just and equitable cooperation.

The Opposition and Infiltration

The center submitted to the Havana conference a study in which it indicated the need for cooperation and coordination among the non-alined nations to create a national culture to confront opposing and infiltrating cultures. Nothing else threatens just cultural creativity and excellence more than the influence of opposing and infiltrating cultures that continue to emphasize, through films and Western series, individual selfishness and the termination of spiritual relations, which oppose organized creative thought and which spread anarchical thought. The studies that fill communications libraries inform us in most cases of statistical data pertaining to the percentage of males or females who read newspapers or who listen to radio or watch television programs, while a very small percentage of the studies touched upon what these individuals read or watch.

If we are to take one sample of enemy information, we will find that the American Information Service, for example, has studied the following items: an analysis of the basic trends and incentives with regard to the people it is addressing, and an analysis of the concerns of these people; identifying the leadership [elite] groups within these societies; identifying the most effective means to be followed in addressing these people; measuring the impact and effectiveness of the service's programs; examining and analyzing reports of the Central Intelligence Agency; and finally analyzing, examining and summarizing the studies conducted by the various universities of the non-alined nations. This matter concerns our peoples. Are we not the most deserving to conduct the necessary studies in order to confront hostile information and to create a successful national information program?

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INTERNATIONAL PHONE SERVICE EXPANDS

Kabul ANIS in Dari 8 Jul 78 p 1

[Text] A five-unit international communications switchboard system recently installed at the Automatic Exchange was inaugurated and put into operation on 6 July 1978 by Colonel Mohammad Aslam Watanjar, deputy prime minister and minister of communications.

In the course of inauguration of these switchboard units, the minister of communications, after stressing the need for and importance of facilitating international communications, said that the Government of the People's Democratic Republic of Afghanistan, in accordance with its progressive aims and the wise directives of Nur Mohammad Taraki, great leader of the People's Democratic Party of Afghanistan, always desires and endeavors to take active and firm measures to serve its fellow citizens and ensure their peace, and the installation of these switchboards is a small example of such endeavors.

The minister of communications has expressed appreciation for the diligence of sincere and patriotic young Afghans, especially that of engineers and excellent workers of the Ministry of Communications, in correct performance of their duties, and wished them success in their ever-increasing cooperation in the realization of the sacred aims of the revolution.

At the inauguration ceremony of the international communications switchboard system the following were present: Engineer Zarif, the deputy minister, department heads and some officials and workers of the Ministry of Communications.

A spokesman of the Ministry of Communications said that the above-mentioned international communications switchboard system, installed for the purpose of communication between Kabul and London, Delhi, Moscow, Teheran, Paris, Peshawar and Quetta, will considerably facilitate international communications for users.

The installation and initiation of operation of these switchboards were carried out by Afghan engineers and workers.

Colonel Mohammad Aslam Watanjar, deputy prime minister and minister of communications, inaugurates the international communications switchboard system (Photo Bakhtar).

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TELEPHONE, TELEX, TELEGRAPH COMMUNICATION BETWEEN MAPUTO AND BEIRA

Maputo NOTICIAS in Portuguese 18 Jul 78 p 1

[Text] Maputo, 27 (AIM)--According to what an official of the Mozambique Postal and Telecommunications Service revealed to AIM [Mozambique Information Agency], the restoration of telephone, telegraph and telex connections between the cities of Maputo and Beira is scheduled for early next year.

The radiocommunication system with Beira by means of the tropospheric system was interrupted in December 1976, when racist forces from Southern Rhodesia destroyed the Chicualacuala tropospheric station, located in Gaza Province near the border with that British colony.

A project is in its completion phase, at present, for establishing communications. It consists basically of the construction and installation of a new tropospheric station at Massinga, in Inhambane Province, that will make connection possible between the Maputo station and the Monte Xiluvo station, in Sofala Province.

At the same time, a tropospheric station will be installed in the country's capital. Two more antennas are also being installed at the Monte Xiluvo tropospheric station aimed at Massinga. The axis of the system will become Maputo-Massinga-Monte Xiluvo-Beira, with a capacity of 120 telephone channels.

The new relay station located in the Massinga area is being built at a site 194 meters high. The technical equipment consists basically of four 10-kilowatt transmitters, eight receivers, four 5-watt exciters, three 250-kilovolt-ampere power sets and four antennas, two aimed at Maputo and two aimed at Monte Xiluvo, each antenna 18 meters in diameter.

The total cost of the project, being executed by CTT [Postal and Telecommunications Service], assisted by cooperative service technicians, is estimated at close to $2.8 million (close to 92,100 contos) of which 2.3 million are financed by means of a loan granted by the African Development Bank.

The primary radiocommunication network of the People's Republic of Mozambique connects the country's capital with certain provincial capitals and population

centers like Beira, Tete, Songo, Quelimane and Namputa by means of high-capacity connections using tropospheric dispersion propagation.

This system was introduced in Mozambique in 1963 by means of the Maputo-Monte Ponduine-Chicualacuala-Monte Xiluvo-Beira connection. In a second phase, it was expanded by means of the Monte Xiluvo-Monte Caroeira-Tete-Songo connection, in 1972.

In that same year, the system was expanded again by means of the Monte Xiluvo-Queilmane-Nampula connection, which became the primary radiocommunication network, after its completion, capable of connecting the cities of Maputo, Beira, Tete, Songo, Quelimane and Nampula.

Nevertheless, after Mozambique became independent, work had to be interrupted with the departure of almost all the technicians in the CTT specialty from the country and for other reasons of a technical nature.

At the end of 1977, a thorough study was made of the old contract. Completion of the work to be performed at the various stations, in order to make connection possible between Maputo and the provincial capitals, was renegotiated with the company awarded the contract. All this work is being performed since March of this year by CTT technical teams and by the contracting company.

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SPERRY UNIVAC MARKET DRIVE REPORTED

Johannesburg SUNDAY TIMES in English 20 Aug 78 p 4

[Article by Tony Koenderman in the "Business Times" section]

[Text]

**SPERRY Univac is planning an all-out bid for an estimated R60-million worth of unexploited computer business in the manufacturing field.**

Spearhead of its campaign is its Univac Industrial System, UNIS, recently launched here, which is a sophisticated method of inventory and production management.

"The total base of computers installed in manufacturing companies in this country is only about R90-million," says Sperry Univac's manufacturing consultant, Isaac Zimner.

"We believe the base should be at least as big proportionately as the computer industry's share of gross domestic product, which is 2 per cent. This means there is at least another R60-million in business waiting to be picked up."

The potential savings postulated by Mr Zimner for a manufacturing company which computerises its materials and production management are dramatic.

"The normal statistic method of inventory control doesn't work in manufacturing," he said.

"If, for example, you aim for 95 per cent availability of parts, and there are 10 components required for a particular assembly, you only get 60 per cent availability of the whole package.

"If there are 25 parts, the availability falls to 26 per cent. Most people compensate by over-stocking. But UNIS keeps stock levels down by recommending orders at the right time and in the most economic quantity."

An increase in stockturn from four to five times a year — which means a 20 per cent saving in inventory — is "easily achievable" with the system, Mr Zimner says.

Thus, if by doing this the inventory investment level was reduced from R1-million to R800 000, a sum of R200 000 would be released to capital. At an interest rate of 20 per cent, this would earn R40 000 a year.

But in addition, there would be considerable savings in inventory carrying costs, which work out at around 24 per cent.

In the example cited, inventory costs would be reduced from R240 000 a year to R192 000, a saving of R48 000 annually.

The total saving would then be R98 000 a year — considerably more than the cost of the installation.

In fact, the aim with the UNIS system is to turn stock six or seven times a year.

On the production management side the system schedules work according to priorities in order to keep a workshop or factory floor fully operational.

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## BRIEFS

RADIO SERVICES' INTERIM CONTROL--The administrator general of South-West Africa, Mr Justice Steyn, has announced that an interim radio board will assume control of radio services in the territory this week. He said in a television interview that the board, consisting of prominent South-West Africans not politically active, would decide on the contents of the radio services. One of the functions of the services would be to counteract the vicious and sometimes extremely dangerous enemy propaganda beamed at the territory by shortwave stations from places such as Lusaka and Luanda. [Text] [Johannesburg International Service in English 0300 GMT 21 Aug 78 LD]

SA-DESIGNED COMPUTER--A $280,000 office complex at which a South African-designed computer system will be manufactured is to be built in Pretoria. The complex will be built in Blueview, overlooking the Swartkops golf course. Work is expected to start within two months. Mr Mel Cunningham, managing director of the company involved, said it was hoped that about three of the SYFA (systems from Africa) computers would be built every month. The computer was designed by seven South Africans who spent two years working in a rented house in Johannesburg. They were unable to get local backing for their system--so, in Mr Cunningham's words--they took off for the computer mecca of the world--the United States. There the system was sold to a company that set up a worldwide distribution network. Last year SYFA systems worth about R17m were sold. Although the system was only launched this week, business worth more than Rlm has already been done. [Text] [Johannesburg THE STAR in English 24 Aug 78 p 24]

CSO: 5500

BRIEFS

AZERBAYDZHAN VILLAGES, COLOR TRANSMISSIONS--From TRUD-TASS roundup: "Only Facts"--Dzhebrail (Azerbaydzhan SSR)--Inhabitants of the remotest villages in the mountains of the lesser Caucasus yesterday watched the first color television broadcasts. A radio relay line more than 300 km long has been built here from Shusha. [Text] [Moscow TRUD in Russian 11 Aug 78 p 4 LD]

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